

Japan's IT Market

The Most Important High-Tech Arena for U.S. Exporters

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Despite the prolonged downturn of the Japanese economy, information technology and wireless communications continue to provide attractive market opportunities for firms interested in the world's second-largest IT market.

TELECOMMUNICATIONS

Japan's telecommunications sector, which has generally outperformed the overall economy, has experienced a remarkable period of activity and change over the past few years. Recent Japanese regulatory changes, including the introduction of domestic and international resale, Internet telephony, and cable telephony, as well as the elimination of foreign investment restrictions in facility-based carriers, have resulted in significant new opportunities.

While Nippon Telegraph and Telephone (NTT) remains dominant in services, new carriers are gaining market share. More than 300 new facility-based telecommunications service providers, generally called new common carriers, now operate in Japan in competition with NTT. The nature of telecommunications traffic in Japan is shifting from traditional wireline services toward broadband and wireless services. With the encouragement of the Japanese government, carriers are accelerating the construction of fiber

networks, and wireless operators are moving rapidly toward next generation services.

Fiber optics has received a significant boost from Japan's declared goals of rapidly expanding fiber-to-the-home service. Although ISDN has proved disappointing, the number of digital subscriber lines to homes presently exceeds 2.5 million, and it is projected to pass the 9 million mark by 2003.

Wireless is another especially vibrant industry within the telecommunications sector. Wireless subscription exceeded 70 million at the end of 2001, and the Ministry of Public Management, Home Affairs, Post, and Telecommunications predicts that, by 2005, more than 80 million Japanese, about three-fifths of the population, will subscribe to some form of mobile service. Japan's grand experiment with always-on wireless Internet access, DoCoMo's i-Mode, has been remarkably successful, and Japanese wireless operators have high hopes for recently introduced third-generation wireless services.

INTERNET ACCESS

Japan is unique in that 70 percent of Internet users can access the Web via wireless communications devices. This is expected to change as the Japanese government pushes for broadband access to 80 percent of Japanese households by 2005. Broadband access, via ADSL or cable modem, presently lags behind that of a number of other Asian countries but is now increasing

at a dramatic rate. Due to competition and deregulation, ADSL service is now as cheap as, if not cheaper than, dial-up Internet access in Japan. The numbers of subscribers to ADSL jumped from 71,000 in 2000 to 1,850,000 by the beginning of 2001. This number is expected to more than double by 2003.

In 2001, approximately 1.5 million Japan households had the option to access communication services via cable, with more than 12 million choosing to subscribe to fixed wireless access.

ON-LINE SALES

The value of business-to-consumer (B2C) goods sold on-line in Japan was estimated to be \$13 billion in 2001 and is expected to grow to \$98 billion by 2005. Most major Japanese retailers have highly developed B2C strategies. B2C e-commerce should grow in tandem with home broadband Internet access. Currently, the real estate and automobile industries account for 46 percent of the total B2C market in Japan. Other industry sectors, including travel, finance, food, gifts, and entertainment are expected to narrow the gap in the coming years.

Business-to-business (B2B) opportunities are growing quickly. Most medium-sized and large Japanese companies are currently looking at B2B trade as one way to cut costs, reduce inventories, and streamline operations. The continuing overall downturn in the Japanese economy

has provided a market opportunity for enterprise resource planning, customer relationship management, and supply chain management suppliers. The Japanese B2B market is currently valued at \$151 billion and is expected to increase to \$870 billion by 2005. The electronics and automobile industries dominate the B2B market in Japan; together they account for 90 percent of the total B2B market.

SOFTWARE

The Japanese software market is dominated by U.S. imports. Of the total imported packaged software market in Japan, 91 percent originates in the United States. Custom software in Japan accounts for 45 percent of the total software market. Japanese industry requires software producers to conform to their existing business models. As a result, custom software makes up a greater share of the market than in most other countries. Japan does not have a large domestic software industry; imports make up almost 50 percent of the total market. As Japanese companies continue to streamline their business processes and look for ways to cut costs, they are expected to continue to seek out American software providers.

E-COMMERCE

The Japanese government is actively promoting domestic IT and e-commerce. Responding to the general perception that Japan was falling behind other industrialized countries in the IT field, the Japanese government launched an IT strategy in 2001 with the goal of becoming the world's most advanced IT nation by 2005. The main elements of this plan include development of the world's most advanced Internet network, facilitation of e-commerce, digitization of government, promotion of e-education, and ensuring the highest network security and reliability in the world.

Over the last several years, the Japanese government has begun to move forward with initiatives and



reforms necessary to develop and strengthen the legal framework for e-commerce, including a revision of laws, rules, and regulations in the area of electronic signatures, privacy, intellectual property, network security, and spam control. Additionally, the private sector has been involved in developing initiatives for consumer protection and domain name registration. The U.S. government welcomes the Japanese government's efforts to improve the legal environment for electronic commerce, but it notes that Japan needs to make more progress in a number of the aforementioned areas, including privacy, intellectual property rights, and electronic signatures.

SEMICONDUCTORS

Since the early 1990s, U.S. semiconductor firms have had a major presence in the Japanese market. U.S. firms have advanced as result of cutting-edge technology, increased globalization, and government advocacy. The three U.S.-Japanese semiconductor agreements represented a major achievement for U.S. trade policy. Although forecasts are upbeat, the Japanese market is expected to grow at a rate slightly less favorable than the other semiconductor regions.

Japan is also an important market for U.S. exports of semiconductor manufacturing equipment. Historically, Japan has been the largest export market for U.S. firms. However, in 2001, Japan fell to second place behind Taiwan.

In the future, capital expenditures by Japanese semiconductor firms are forecasted to lag behind those from other regions. Japanese semiconductor firms were devastated by the collapse of prices for dynamic random access memory, as well as downturn in the IT sector. As a result Japanese semiconductor manufacturers plan to be conservative with spending.

For more information about Japan's information technology market, as well as trade specialist contacts, visit <http://exportit.ita.doc.gov>. The full text of the *ExportIT* report on Japan is available on-line there as well. ■